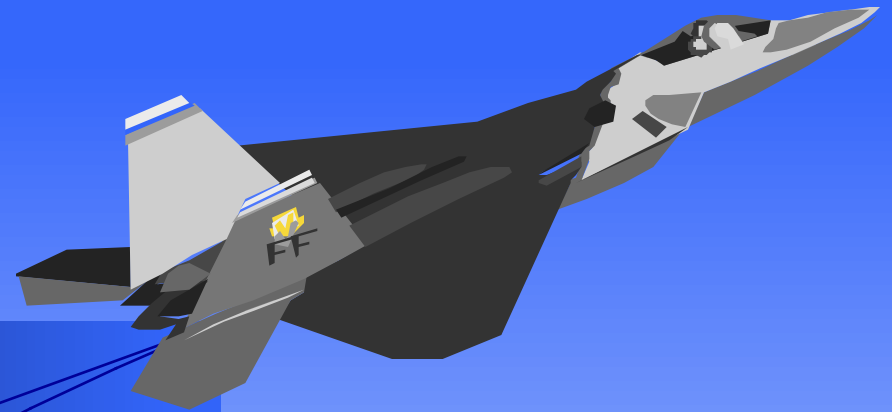


Air Force Modeling, Simulation and Analysis



**Col Flash Gordon
HQ USAF/XOCA**



Modeling, Simulation & Analysis Applications in USAF

- ...used extensively across a spectrum of activities:
 - Long term planning
 - Acquisition
 - Research & Development
 - Test & Evaluation
 - Training & Education
 - Operations
- Critical tool for decision-makers...growing use
- ...many separate, diverse disciplines
 - Decentralized, localized use
 - Integrated into functions, processes
 - Focused, customized applications
 - No monolithic simulations
- Standardization emphasis
 - Reduce duplication
 - Counterproductive “stovepipe” elimination
 - Jointness, interoperability
 - Improve reuse, credibility



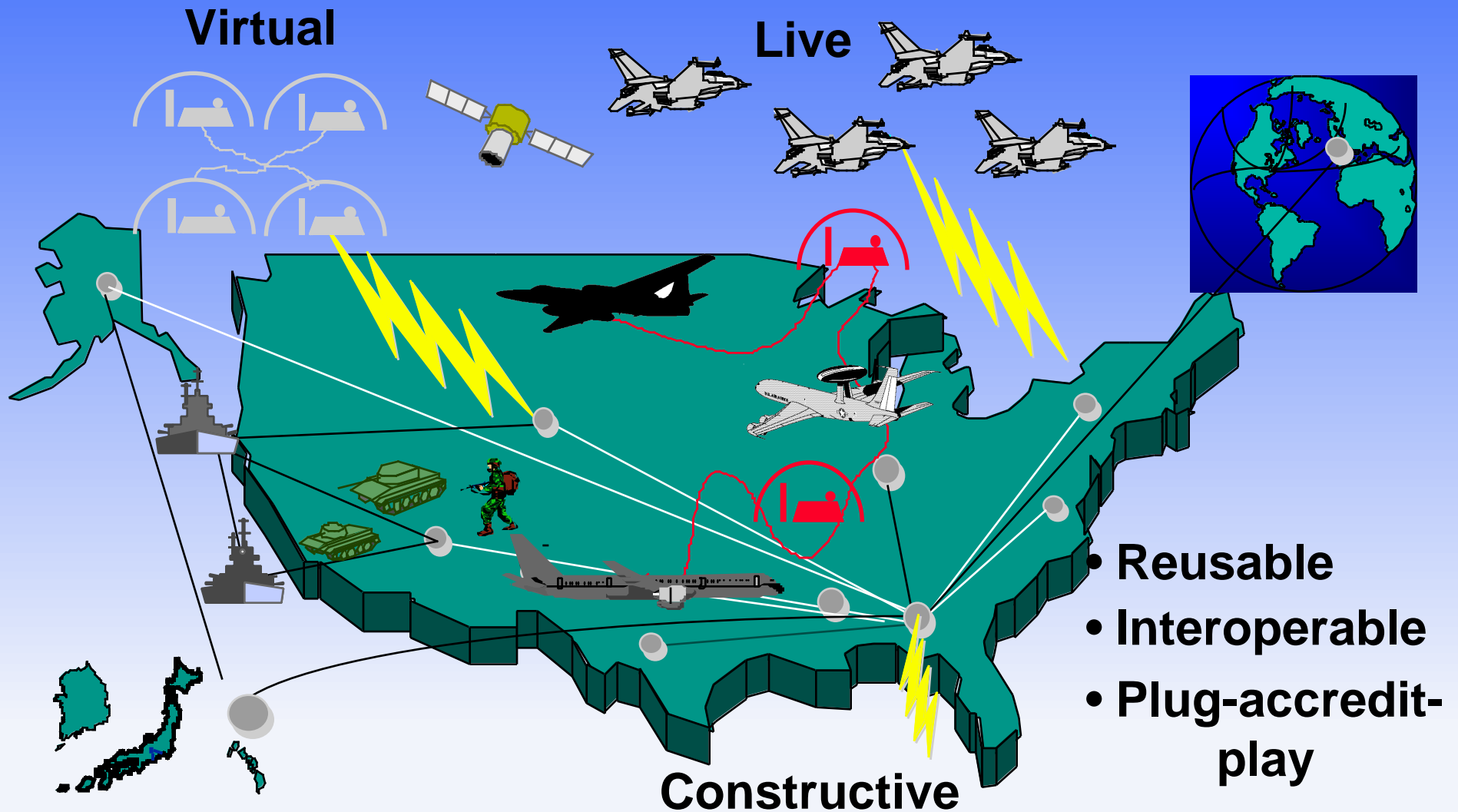
MS&A Fundamental Changes

- Air Force Initiatives
 - Established Air Staff MS&A Office (1993)
 - Held 4 Star M&S Summit (1995)
 - Established AF M&S Agency, Orlando (1996)
 - Developed M&S Master Plan, Functional Area Plan, Funding plan
 - Established policies on VV&A, data standards, model management, AoAs
- Military Affairs Revolution
- Dramatic ADP hardware & software advances
- New Joint initiatives
- Quality revolution: Integrated product development processes
- Shrinking resources, expanding missions:

Need for a new approach to M&S (reduce stovepipes!)

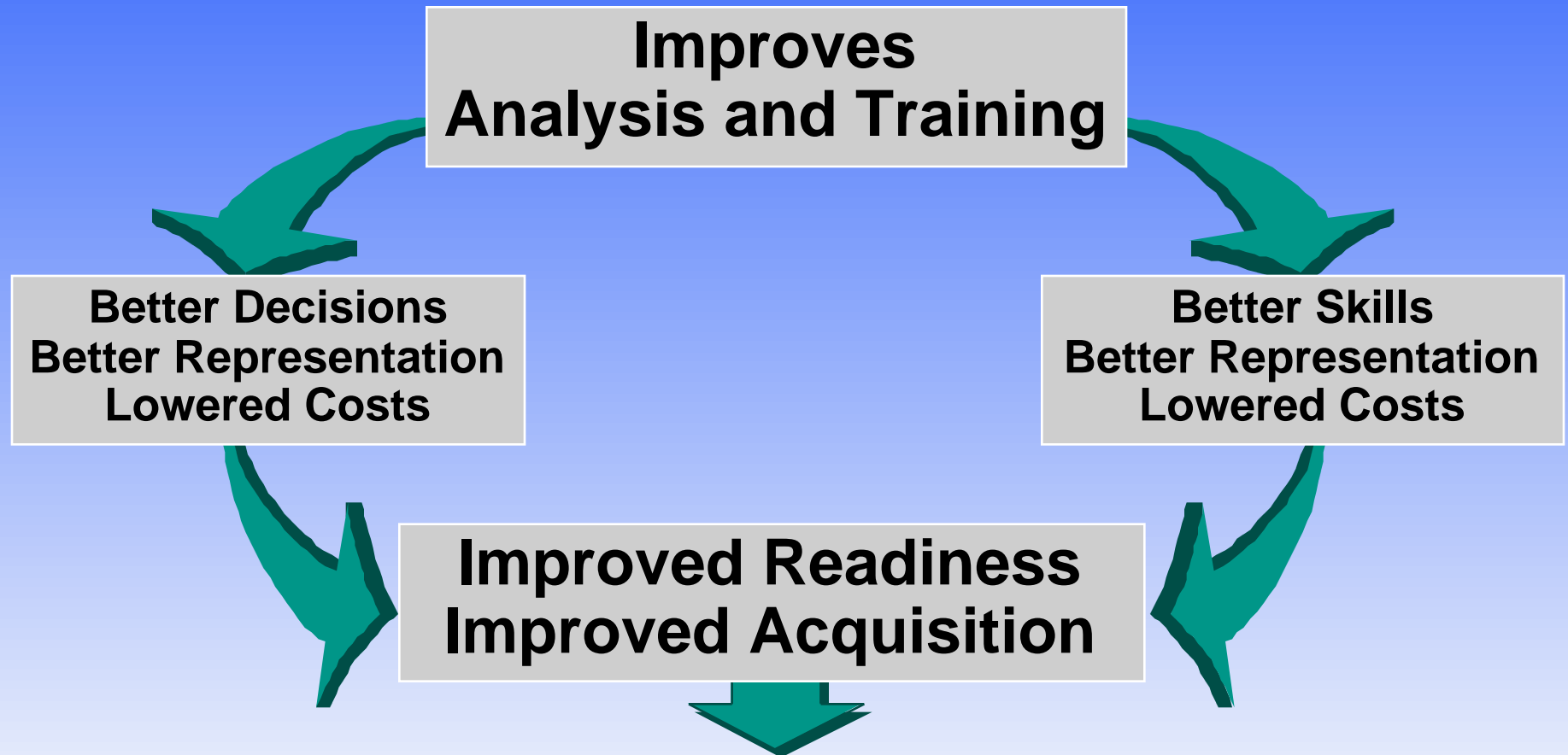


The Air Force vision is - “A Joint Synthetic Battlespace...”





**“...supporting better decisions
and warfighting skills ...”**

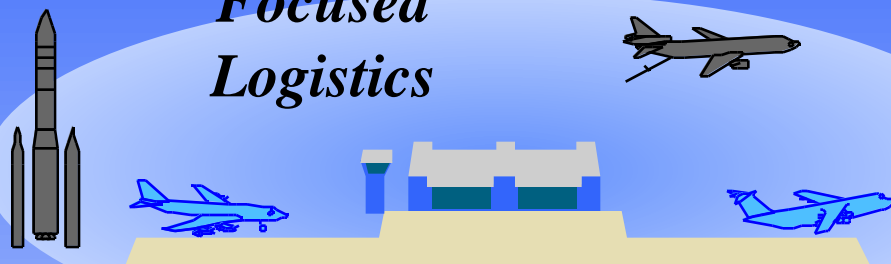


***“...building the world’s most respected
Air and Space force...”***



“...for the Joint Force Commander.”

Focused Logistics



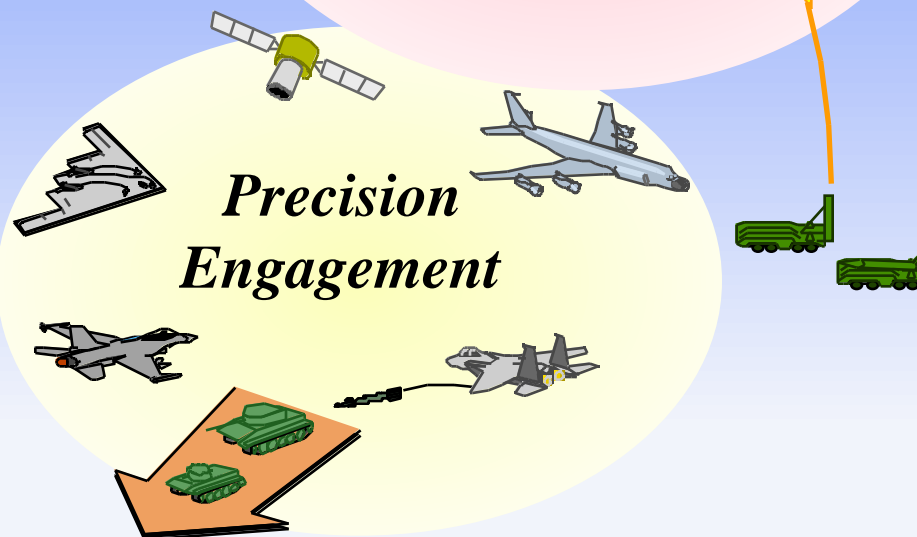
Full-Dimensional Protection



Dominant Maneuver

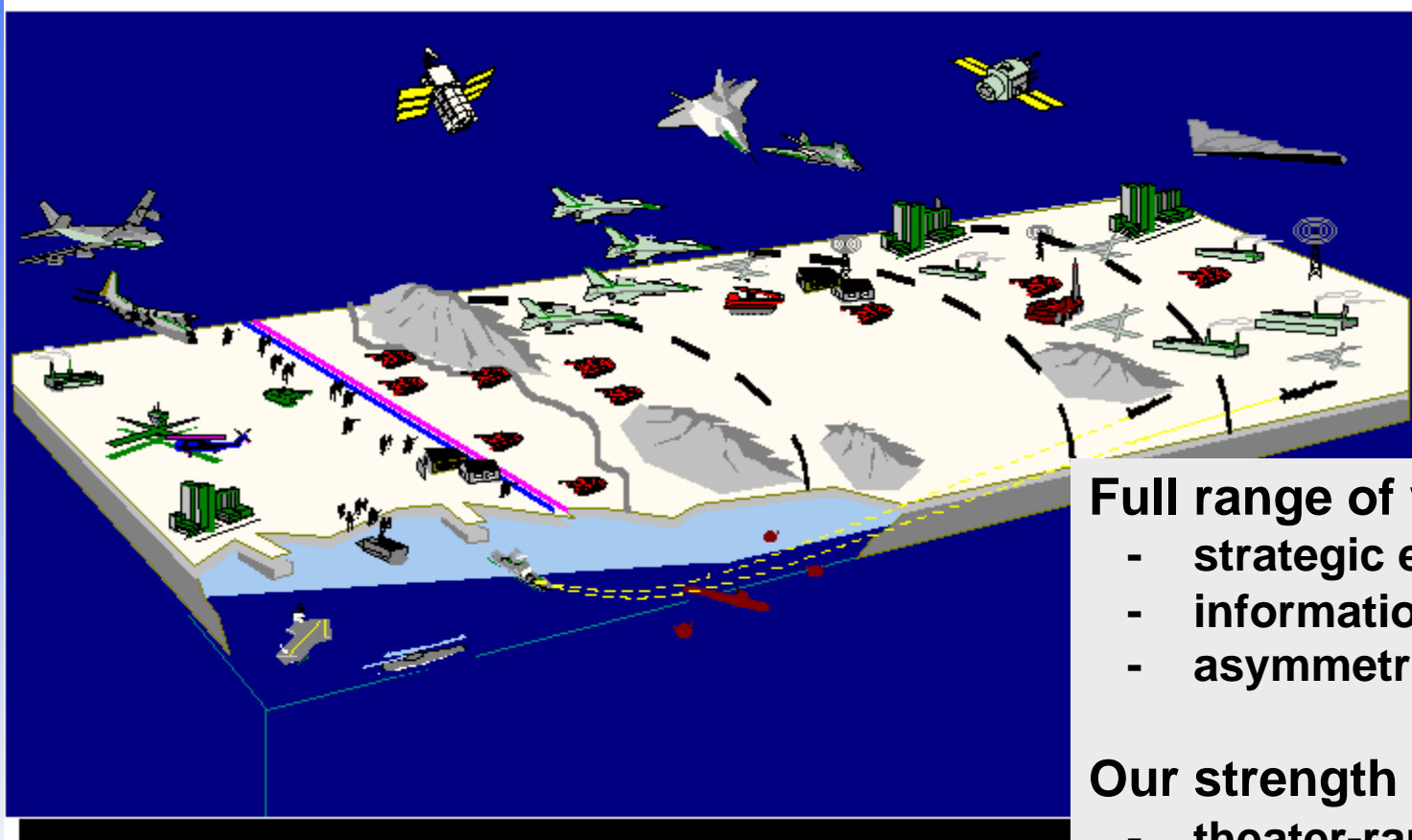


Precision Engagement





Accurately representing Airpower in a Joint MS&A World



Full range of warfare

- strategic effect
- information warfare
- asymmetric strategies

Our strength

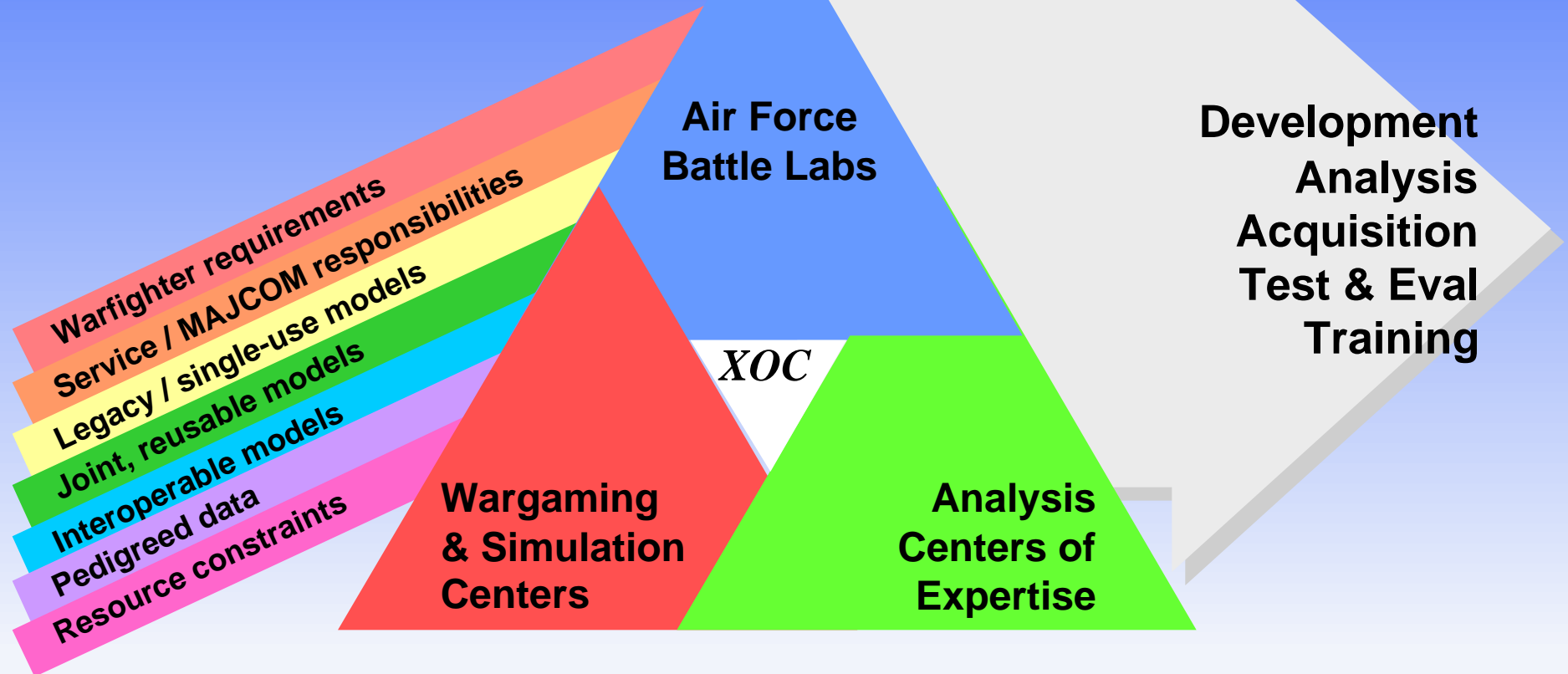
- theater-ranging perspective



Structuring the Air Force MS& A Community

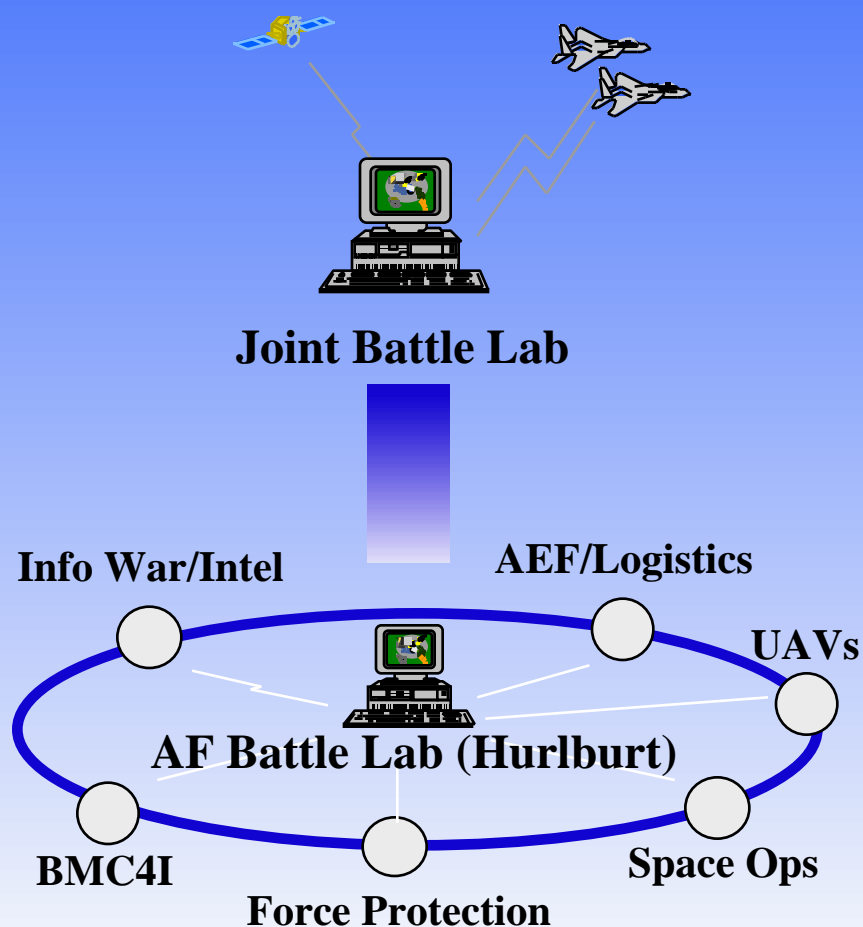
Competing priorities

Coordinated plan

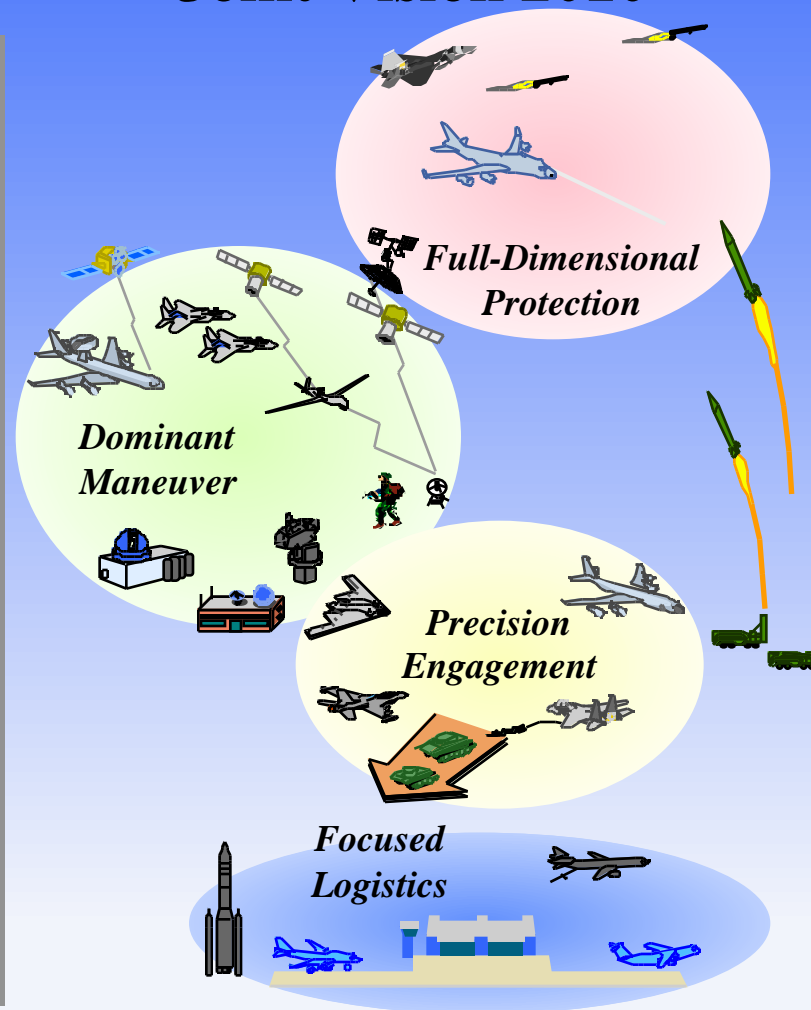




Battle Labs - Revolutionary Concepts

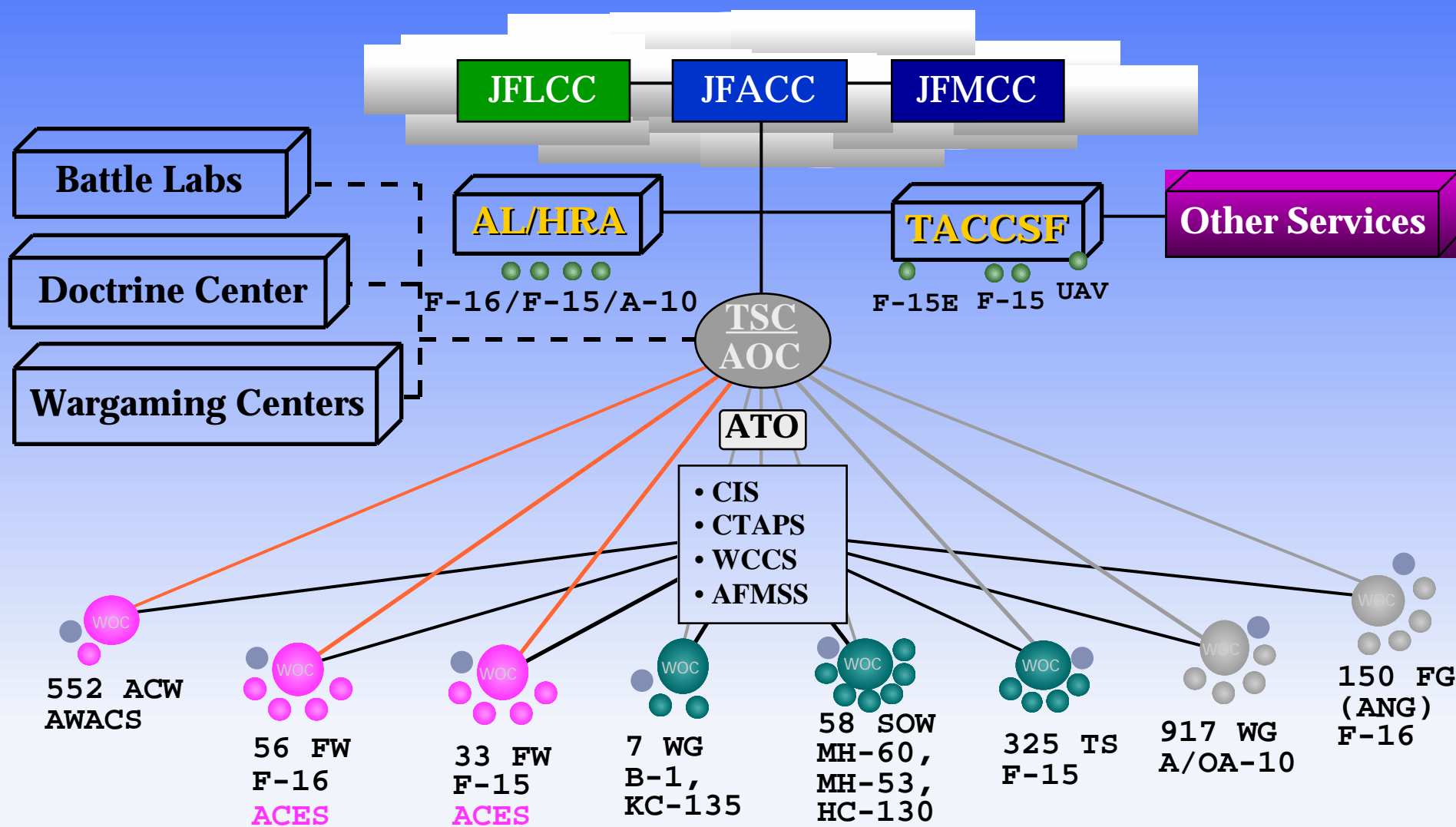


Joint Vision 2010





Mission Training System: Cornerstone





Air Force Plans for MS&A

Promote

- Standards
 - Data
 - Architecture
- Joint Interoperability
 - Among models and simulations
 - Among components
- Reusability
 - Cost effective
 - Approved components

Through

- Air Force Policy and Guidance
 - AFPD 16-10 (draft)
 - VV&A (AFI16-1001)
 - Model Mgmt (AFI16-1002)
 - Data Stds (AFI16-1003)
- HLA compliance
- JMASS, JSIMS, JWARS
- Diverse funding sources



Further Challenges

Joint Vision 2010

Precision Engagement

Dominant Maneuver

Full-Dimensional Protection

Focused Logistics

USAF Global Engagement

Air & Space Superiority

Global Attack

Precision Engagement

Rapid Global Mobility

Information Superiority

Agile Combat Support

Information Integration
via Synthetic Environments

Expanded Representation
of Conflict

Global Engagement: A Vision for the 21st Century Air Force